

STUDIES ON *MIKANIA* (COMPOSITAE: EUPATORIEAE) - XVIII. NEW SPECIES FROM BRAZIL

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ABSTRACT

Mikania nana, *M. pacei*, and *M. reynoldsii*, three new species from Brazil, are described and illustrated.

KEY WORDS: Compositae, Eupatorieae, *Mikania*, Minas Gerais, Paraná, Brazil

Continued study of the genus *Mikania* has resulted in the recognition of the following new species from Brazil.

Mikania nana W. Holmes, *sp. nov.* (Fig. 1). TYPE: BRAZIL. Paraná: Rio Pequena (mun. São José dos Pinhais), 900 m, 5 November 1969, *Gert Hatschbach 22847* (HOLOTYPE: MBM).

Species ad *Mikaniam vimineam* DC. similis sed differt foliis elliptico-ovatis (non linearibus) et petiolatis (non sessilibus).

Semidecumbent to erect; stem 21 cm long, striate, villous to semitomentose. Leaves opposite, lanceolate to elliptic ovate, 1.5-3.6 x 1.0-1.7 cm, bases cuneate to attenuate, with 3 conspicuous nerves, usually with another pair of obscure nerves below these, apices acute, margins irregularly serrate to doubly serrate, apices of teeth denticulate, upper surfaces pilose, muricate, lower surfaces pilose particularly on the nerves; petioles 0.3-0.5 cm long, sparingly pilose; internodes 1-5 cm long, gradually becoming longer above. Capitulescence racemo-corymbose, dense, 2.0 x 3.5 cm; branchlets villous. Heads borne more commonly in clusters of three, the central one nearly sessile, the outer short pedunculate, or heads borne singly; ultimate branchlets (peduncles) 0.5-2 mm long, villous. Heads 9-10 mm long; subinvolucral bracts linear to oblanceolate, 5-7 mm long, obscurely nerved, apices pilose. Phyllaries oblong to oblong

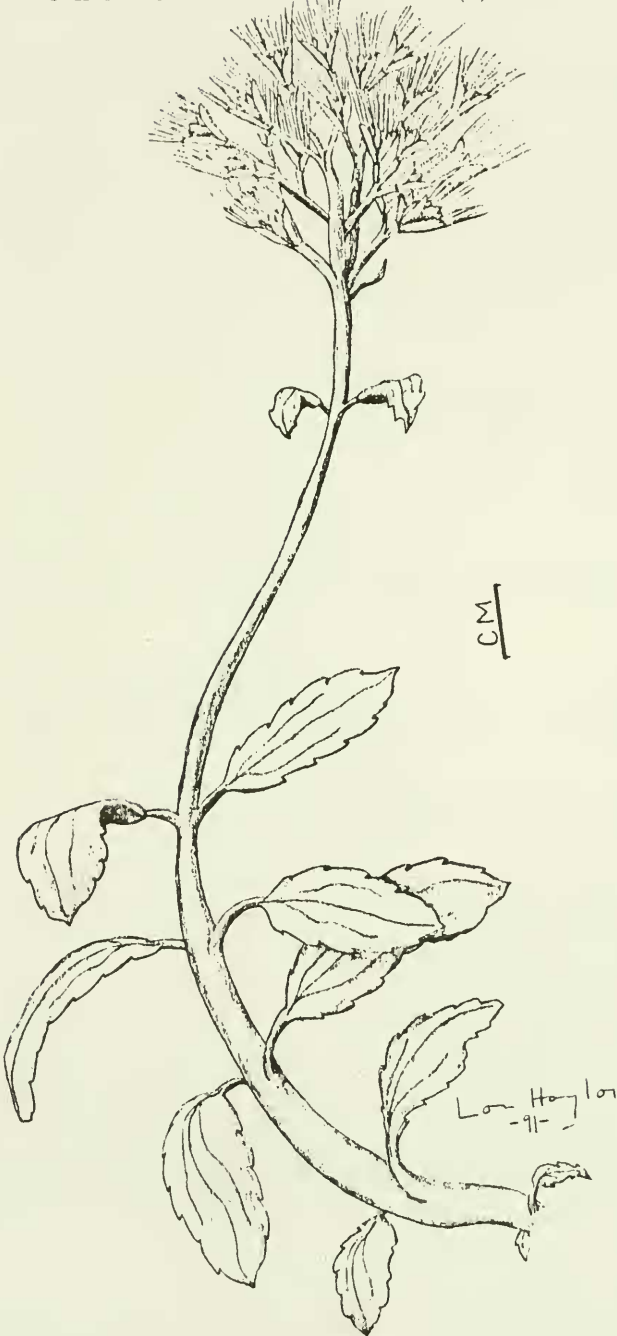


Figure 1. Habit of *Mikania nana* W. Holmes.

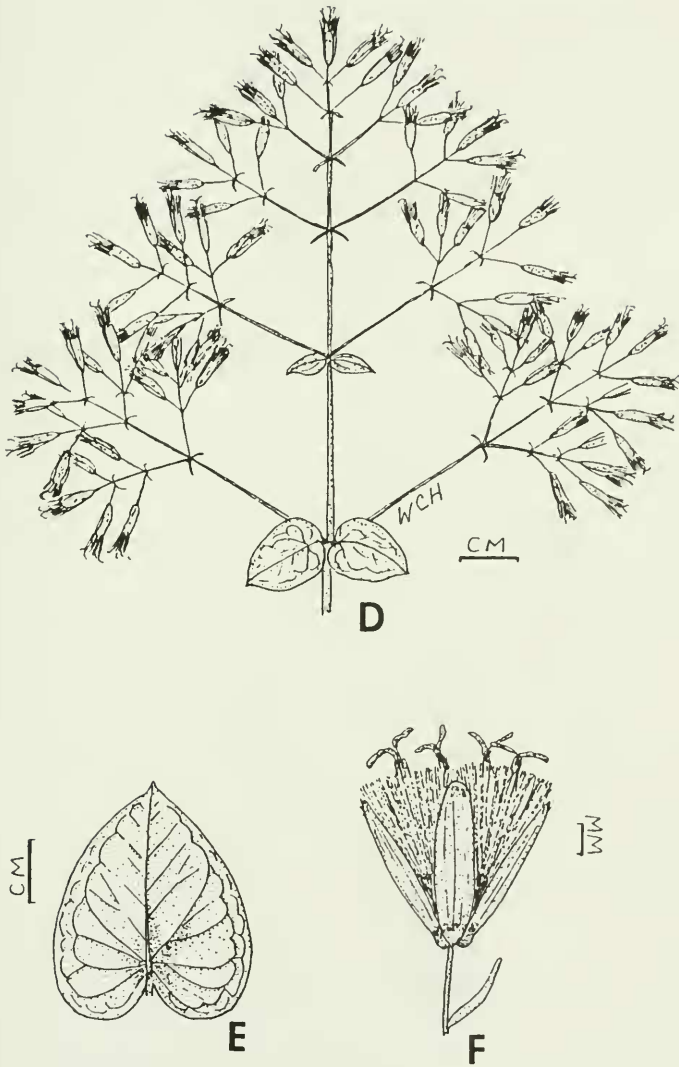


Figure 2. *Mikania pacei* W. Holmes. D. capitulescence; E. leaf; and F. head with subinvolucral bract.

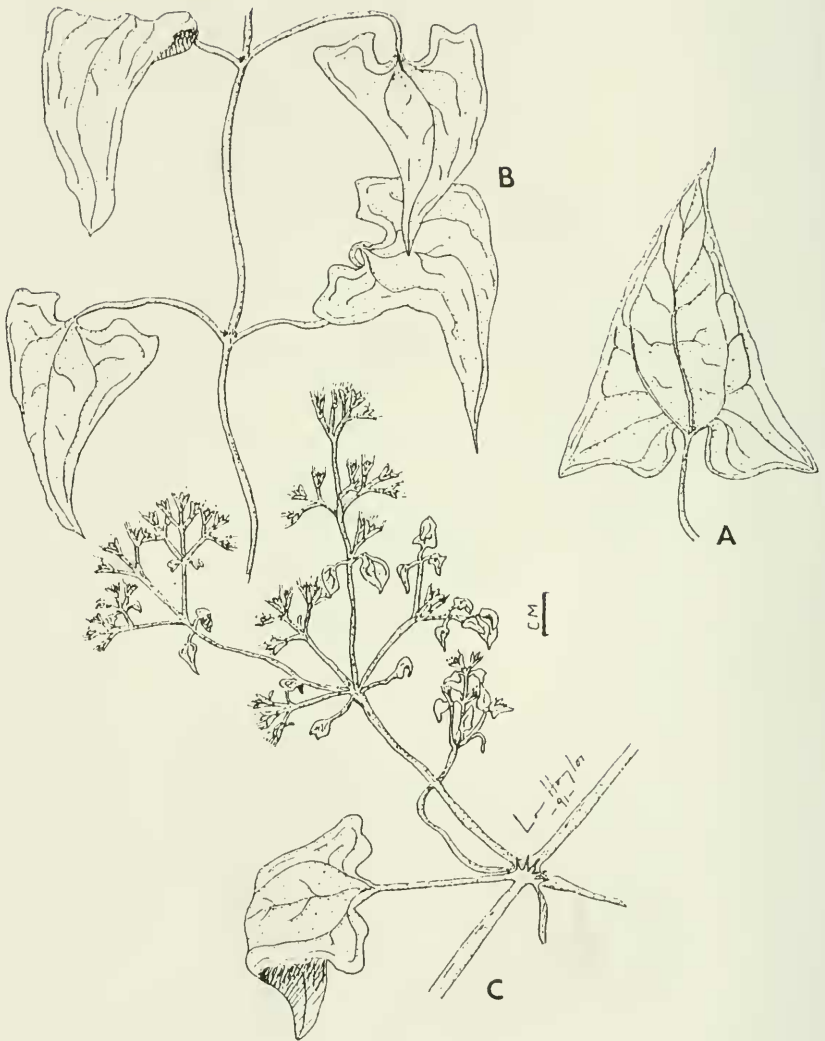


Figure 3. *Mikania reynoldsii* W. Holmes. A. leaf; B. stem and leaves; and C. capitulescence and stipulelike appendage.

ovate, 5.0-5.5 mm long, mostly glabrous, bases slightly gibbous, apices acute to obtuse, slightly pilose. Corollas white, 5.0-5.3 mm long, tubes 2.5-3.0 mm long, throats semicampanulate to funnelform, 1.00-1.75 mm long, teeth ovate, 1.00-1.25 mm, densely villous; stigmatic surfaces densely hirsute. Achenes 2.0-2.7 mm long, lightly villous. Pappus bristles 50-60, 5-6 mm long, margins scabrid.

The new species is known only from the type material. It is characterized by its diminutive size, racemo-corymbose capitulescence, 9-10 mm long heads, densely villous corolla teeth, and hirsute stigmatic surfaces.

Mikania pacei W. Holmes, *sp. nov.* (Fig. 2). TYPE: BRAZIL. Minas Gerais: Senador Mourão (mun. Diamantina), 24 January 1978, *Gert Hatschbach 40884* (HOLOTYPE: MBM; Isotype: BAYLU).

Species ad *Mikaniam obtusum* DC. similis sed differt foliis ovatis et orbicularibus (non oblongis) cum basi auriculata (non obtusa).

Erect, 1.0-1.3 m tall; stems terete, glabrate, internodes 4-5 cm long. Leaves opposite, broadly ovate to nearly orbicular, 2.5-5.0 x 1.8-3.8 cm, bases auriculate, apices rounded and apiculate, margins entire, venation semipalmate from just above the base of the blade; upper and lower surfaces glabrate, reticulate; petioles ca. 1 mm long, 2 mm wide (the leaves appearing nearly sessile), glabrous. Capitulescence paniculate, 15-23 x 15-20 cm, heads in corymbiform clusters of ca. 8 x 7 cm; lower bracts leaflike, upper bracts becoming smaller, bases cuneate; branchlets glabrous, terete; ultimate branchlets (peduncles) 4-9 mm long, thin, glabrous. Heads 8-9 mm long. Subinvolucral bracts linear, glabrate, borne at base of the peduncle. Phyllaries ovate to elliptic oblong, 4.0-4.8 mm long, apices rounded, puberulent, margins ciliate, especially in the upper half. Corollas cream. ca. 4.5 mm long, tube ca. 2 mm long, throat funnelform to semicampanulate; teeth ovate, ca. 1 mm long. Pappus bristles white, 38-40, 5.0-5.5 mm long, margins scabrid. Achenes 2.2 mm long, gradually tapering from summit to base, brown.

PARATYPE: BRAZIL. Minas Gerais: 15 km ao norte de Cunha Magalhães' (mun. Cunha Magalhães), 20 January 1972, *Gert Hatschbach 29013*, *L.B. Smith*, & *E. Ayensu* (MBM, BAYLU).

Mikania pacei is similar to *M. obtusata* DC., a species with oblong leaves with acute to obtusely narrowed bases (Barroso 1958). *Mikania pacei* has broadly ovate to nearly orbicular leaves with auriculate bases.

The species is named in honor of Lula Pace: botanist, geologist, and first woman on the Baylor University faculty to hold the doctor of philosophy degree (Trantham 1925). Her plant collections made between 1903-25 are the basis of the university collection. Dr. Pace, one of Baylor's most revered professors,

made significant original contributions to the botanical literature, primarily in cytology and embryology.

Mikania reynoldsii W. Holmes, *sp. nov.* (Fig. 3). TYPE: BRAZIL. Minas Gerais: Trilha dos Garimpeiros (mun. Grão Mogol), 1100 m, 12 February 1991, *Gert & Maria Hatschbach 55084 & O.S. Ribas* (HOLOTYPE: MBM; Isotype: BAYLU).

Species ad *Mikania micranthum* HBK. similis sed differt foliis sagittatis ad subhastatis (non triangulo-ovatis) et pseudostipulis manifestis (non obscuris).

Twining vines to 5-6 m long; stems terete, striate, glabrate; internodes 7-13 cm long. Leaves opposite, triangular, blades 5-8 x 3.5-5.0 cm, bases sagittate to subhastate, acute at the insertion of the petiole, trinerved from the bases; apices acute to acuminate, margins entire to remotely denticulate, glabrous above, with resinous glands below; petioles 2.0-4.5 cm long, thin, glabrate; opposite petiole bases connected by stipulelike appendages ca. 5 mm wide and 1.5 mm long, margins serrate to fimbriate to lobed. Capitulescence a compound corymb, ca. 10 x 10 cm; heads disposed in corymbs, 4 x 6 cm; branchlets glabrate, angular; bracts similar to leaves but reduced in size. Heads 6.5-7.0 mm long; ultimate branchlets (peduncles) 0.5-3.5 mm, glabrous; subinvolucral bracts elliptic to obovate, ca. 3 mm long, acute to acuminate, glabrous. Phyllaries elliptic oblong to ovate, ca. 4 mm long, acute, glabrous except for the puberulent to slightly ciliolate apices. Corollas white to cream, ca. 3 mm long, tube ca. 1.2 mm long, throat funnelform to campanulate, ca. 1.3 mm long, teeth deltate-ovate, ca. 0.6 mm long, acute-acuminate. Achenes ca. 2.4 mm long, tan, tapering from summit to base, with globular resinous glands. Pappus bristles 31-36, 2.5-3.0 mm long, white, scabrid.

PARATYPE: BRAZIL. Minas Gerais: Grão Mogol (mun. Grão Mogol), mountains to the west of town, 1130 m, 14 Jun 1990, *W.C. Holmes 5069* (BAYLU, MBM).

The new species appears similar to the well known and widely distributed *Mikania micrantha* HBK., a species with triangular-ovate leaves with cordate bases, heads 5-6 mm, and a flat topped corymbose capitulescence (Robinson 1934). *Mikania reynoldsii* is distinguished by its triangular leaves with sagittate to subhastate bases and more branched capitulescence. Both species possess stipulelike enations, but those of *M. reynoldsii* are considerably more prominent than those of *M. micrantha*.

The new species commemorates Dr. Herbert H. Reynolds, President of Baylor University, whose dynamic stewardship of the University has promoted creative activities and research. His foresightedness in recognizing the importance of international studies has greatly advanced botanical studies at Baylor.

This paper and a forthcoming treatment of the *Mikania* of Paraná, in collaboration with Dr. Gert Hatschbach of Museu Botânico Municipal of Curitiba, are a direct product of his patronage.

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